

# **Credit Card Default Prediction**

Wireframe Documentation

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## Homepage

- The homepage of the webapp, consists of two sections:
  - o Sidebar containing Input Parameters pertaining to Demographical inputs such as: Credit Limit (Limit balance), Gender, Education level, Marital Status and Age.
  - o The user can type and set the Credit limit and the age.
  - o User can select from the provided options when selecting Gender, Education and Marital Status.
  - o Repayment status can be selected from a drop-down menu, while user has the freedom to input the bill amount.
- The input parameter sidebar can be removed from the screen using the cross button situated on the top right of the sidebar, if the user wishes to do so.
- The app harbours a custom colour theme of Light green and white, which many users may find soothing to their eyes.
- Additionally, Streamlit also gives the user the option to switch to dark-mode or light-mode.

The screenshot displays the 'Credit Card Default Prediction' web application. On the left is a green sidebar titled 'Input Parameters' with a close button (X) at the top right. It contains four sections: 'Demographics' with a 'Credit Limit' slider set to 0; 'Gender' with radio buttons for 'Male' (selected) and 'Female'; 'Education' with radio buttons for 'Graduate school' (selected), 'University', 'High school', and 'Others'; and 'Marital Status' with radio buttons for 'Married' (selected), 'Single', and 'Others'. At the bottom of the sidebar is an 'Age' slider set to 18. The main content area has a white background and a title 'Credit Card Default Prediction' at the top right, next to a 'Deploy' button. Below the title, there are two columns: 'Repayment status' and 'Bill Amount (\$)'. The 'Repayment status' column lists months from September to April, each with a 'PAY' label and a dropdown menu currently showing 'Pay duly'. The 'Bill Amount (\$)' column lists the same months, each with a 'BILL\_AMT' label and a numeric input field set to 0. Each input field has a '+' button on the right.

## *Prediction*

This page mainly consists of two sections:

- Amount of Previous payments (where the user can type the previous payment amounts)
- In Prediction Result section, the user can 3 types of results i.e
  - o The likelihood of credit card default
  - o Credit Utilization Ration (CUR)
  - o The Probability of default
  - o Info button below clarifying why the probability of default shows 11.30% in the beginning.

### Amount of previous payments (\$)

September PAY\_AMT

0

+

June PAY\_AMT

0

+

August PAY\_AMT

0

+

May PAY\_AMT

0

+

July PAY\_AMT

0

+

April PAY\_AMT

0

+

### Prediction Result

Low likelihood of default.

**Credit Utilization Ratio: 0.00%**

**Probability of Default: 11.30%**



*Link to the web application:*

<https://credit-card-default-prediction-lh653hvk6akelqbfzzf5g.streamlit.app/>